METHODS AND SYSTEMS FOR PREDICTING FUEL SENSOR PERFORMANCE WITHIN A TANK DURING MOTION

ABSTRACT OF THE DISCLOSURE

Methods and systems for predicting fuel sensor performance during motion are disclosed. In one embodiment, a method includes receiving tank geometry information, receiving sensor configuration information, and receiving tank motion information. The method then computes a fuel (surface) plane-to-sensor intersection for at least one tank position based on the tank motion information, and also computes a wetted volume at every fuel (surface) plane-to-sensor intersection for each sensor location based on the sensor configuration information. Finally, the method computes a fuel quantity at every fuel (surface) plane-to-sensor intersection based on a sum of the wetted volumes.

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